



United States
Department of
Agriculture

Natural Resources
Conservation Service

National Plant
Data Center



A Member of the
National Science
And Technology
Consortium



National Plant Data Center

Plant Information Available

October 2001



Table of Contents

Mission & Vision	3
Center Staff And Locations	4
NPDC Supports Programs & Activities	5
How To Obtain Information	6
Plant Information Available	7
Information Under Development	9

National Plant Data Center

Mission

The National Plant Data Center (NPDC) provides leadership for the design, development, management, access, and marketing of agency plant information, particularly through the PLANTS Web site. It focuses resources on plant data definition, prioritization, collection, quality control, integration, dissemination, and interpretation for NRCS use in conservation practices and automated tools. It partners internationally to acquire plant data and new technologies and provides a national standard for basic plant data.

Vision

The NPDC is recognized as a national and global leader in the development of taxonomically-based databases and developing and disseminating plant information and technology to assist in the conservation of our natural resources.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

National Plant Data Center

Staff and Locations

P.O. Box 74490
Baton Rouge, Louisiana 70874

J. Scott Peterson

Director

Baton Rouge, Louisiana
(225) 775-6280
scott.peterson@usda.gov

M. Kat Anderson

Ethnoecologist

University of California
Davis, California
(530) 752-8439
mkanderson@ucdavis.edu

Phil Haney

Microcomputer Specialist

Baton Rouge, Louisiana
(225) 775-6280
phil.haney@usda.gov

James Henson

Plant Physiologist

Baton Rouge, Louisiana
(225) 775-6280
james.henson@usda.gov

Percy Magee

Natural Resource Specialist

Baton Rouge, Louisiana
(225) 775-6280
percy.magee@usda.gov

Lincoln Moore

Forest Ecologist

Baton Rouge, Louisiana
(225) 775-6280
lincoln.moore@usda.gov

John Scheetz

*National Plant Materials Information
Coordinator*

Montana Plant Materials Center
Bridger, Montana
(406) 662-3863
john.scheetz@usda.gov

Mark Skinner

National Botanist

Baton Rouge, Louisiana
(225) 775-6280
mark.skinner2@usda.gov

Angelique Verret

Natural Resource Specialist

Baton Rouge, Louisiana
(225) 775-6280
angelique.verret@usda.gov

Shipping Address:

USDA, NRCS, NPDC
B.A. Little Road
Southern University
Baton Rouge, LA 70813

NPDC Supports Conservation Programs and Initiatives

The NPDC, in partnership with data contributors, provides plant data and information for agricultural and conservation programs and initiatives. In addition, the Center supports the Natural Resources Conservation Service strategic plan.

National Buffer Initiative

Grazing Lands Conservation Initiative

Farm Bill

Wetland Conservation Initiative

Animal Feeding Operations (AFO)

Grazing Lands Application (GLA)

Field Offices & Service Centers

Conservation Planning, Effects, & Inventory

Nutrient Management & Environmental Compliance

Natural Resources Inventory (NRI)

National Soils Information System (NASIS)

Ecological Site Information System (ESIS)

Erosion Prediction Models (RUSLE, WEP)

Ecological Restoration & Bioengineering

Plant Materials Information System

Wetland Identification & Delineation

Limited Resource Client Assistance

Invasive Species Management

How To Obtain Information

Plant information is available either directly through the PLANTS World Wide Web site on the Internet or through your local USDA Service Center or NRCS Field Office.

PLANTS Web Site

<http://plants.usda.gov/>



The award winning PLANTS Web site contains general information on all 43,000 U.S. plant and lichen species, plus expanded information on over 2,000 conservation plants.

Plant Information Available

A few of the key areas of resource information that are needed to address natural resource conservation and the implementation of practices include plants, soils, and climate. The PLANTS Web site provides you with basic information on all plants in the U.S. and more detailed information on priority plants used in decision-making and practice application for the landowner.

All Plants

Plant Profile: Available for the 43,000 plants in PLANTS. Provides direct access to basic attribute data, such as, name, synonyms, distribution map (state level for all and county level for over half of the states), family, growth habit, duration, Wetland Indicator Status, related Web sites, and U.S. nativity, plus images, if present. Also provides access to the Fact Sheet, Plant Guide, or Characteristics, if available for the plant.

Conservation Plants

Plant Guides: Two to eight page documents addressing the use, description, propagation, establishment, production, and availability of a species. The guide also contains references for further inquiry. PLANTS currently has 300 guides on-line. Format: pdf and doc.

Plant Fact Sheets: Brief one to two page documents informing the user about various species of conservation plants. Format: pdf or doc.

Plant Characteristics: About 100 plant characteristics have been compiled on 2,000 important conservation plants and are accessible by species/cultivar.

Culturally Significant Plants

Plant Guides: Detailed document addressing key plant species of importance to the Native American culture. Format: pdf or doc.

Invasive Plant Species

State Noxious Plant Checklists: State legal lists integrated into PLANTS with links to more information.

Invasive Plant Checklists: A list of plants from various published sources for species with known invasive characteristics. Includes links to additional sources of information.

Links to General Information: General links to Web sites pertaining to weed management and control.

Checklists

State Plant Checklists: Produce synonymized lists alphabetized by scientific or common name. The basic data are developed cooperatively by the Biota of North America Program.

Checklists by Family or Genus: Produce synonymized lists alphabetized by scientific or common name. The basic data are developed cooperatively by the Biota of North America Program.

Threatened & Endangered Plants: Provides lists of plants, integrated into PLANTS, that are derived from USFWS threatened and endangered plant data.

NWI Wetland Indicator Status Reports: Provides lists of plants, integrated into PLANTS, that are derived from the USFWS National List of Vascular Plant Species that Occur in Wetlands (1988).

Classification (Phylogenetic) Reports: The user can select a hierarchical report by selecting any level from genus to kingdom.

Images

Color Pictures: Visit the Photo Gallery to view thousands of images. If available for a particular species, they will be present on the specific species Plant Profile.

Line Drawings: Projected to be on-line in 2002 with 6,000 line drawings.

Links

Throughout the PLANTS Web site, links to further information are accessible. General links are accessible through the Links area of the top frame on the Home Page. Species specific links are accessible at the bottom of each Plant Profile, particularly for key weeds and conservation species.

Classification Report

This report allows the user to easily search for closely related species. A hierarchical classification is displayed so that the user just clicks upon the level of their interest. This is accessible from the PLANTS Home Page or each species Plant Profile.

PLANTS Advanced Query

This enables users to search PLANTS using any plant attribute contained in the database, then display or download the information. This also enables the user to produce a list of key conservation plants meeting specific criteria.

Gateway to Other Modules

- **Alternative Crops:** A list of crops and links to cultivation and marketing information across the Web.
- **Ecological Site Information System:** ESIS is the repository for the data associated with the collection of forestland and rangeland plot data and the development of ecological site descriptions.
- **Crop Nutrient Tool:** This tool provides estimates of nutrient (N, P, K) removal by crops. These estimates are used to calculate nutrient balance sheets, which are employed in the design of animal waste management systems. The crop nutrient uptake module automates and augments the information that is currently in Chapter 6 of the NRCS Agricultural Waste Management Field Handbook.
- **Plant Materials Information:** This provides access to plant materials information and technology, plus contact information for the Plant Materials Centers and Specialists located across the U.S. and its territories.
- **VegSpec:** Vegspec is a web-based decision support system that assists land managers in the planning and design of vegetative establishment practices.

PLANTS served 1.2 million extended user sessions in 2001
--

Information Under Development

Distribution Update

The NPDC, in cooperation with the USDA, Animal & Plant Health Inspection Service, Raleigh Plant Protection Center, are developing a module within PLANTS that will permit users to submit new distribution records for consideration. The driving thrust of this effort will be to provide a central clearinghouse for new weed distribution data so that we can bring PLANTS state and county distributional maps more in sync with current knowledge for a national view. First iteration on-line in Spring 2002.

State Threatened & Endangered

State lists of threatened and endangered plants will be integrated into the Threatened & Endangered portion of PLANTS. You will be able to view state lists relative to PLANTS currently accepted names and access further information both on and off site for the listed species. That project is expected to be on-line in 2002.

Dedicated Links

From the Plant Profile, the user is able to move directly to pertinent information on their target plant in other key Web sites (some on-line include CalFlora, Flora of North America, Germplasm Resources Information Network, Atlas of Florida, etc.). New high quality sites will be added periodically.

Plant Materials Technology

In partnership with the NRCS Plant Materials discipline, a module is being developed that will permit the user to search over 800 indexed plant materials publications for information on planting, production, management, maintaining, and utilizing plant species for natural resource conservation, buffers, forage, wildlife habitat, restoration, erosion control, water quality, nutrient management, and other practices.

Web-Based Training

The NPDC, Wetland Science Institute, Louisiana State Office, and other partners, are currently developing a pilot training module entitled "*Identification of Common Grass Genera of Louisiana*."

Plant Identification

The product will be a Windows-based tool that will assist field staff and the public in the identification of vascular plants. The actual tool is called a "polyclave or random-access key" and allows the user to tag characteristics of the plant they are holding in their hand. As additional characteristics (ex. woody, 3 meters high, alternate leaves, etc.) are clicked, the data set is reduced until the target plant is identified in fewer than ten clicks. Species descriptions, images, and help screens assist the user.

- **Identification of the Grasses and Grass-likes of Louisiana:** It is being developed in partnership with the NRCS Louisiana State Office and Northeast Louisiana University. This is expected to be released in 2002.
- **Wetland Plants of the Continental United States:** The beta version is planned for field testing in 2003 and encompasses about 4,000 wetland plants. The foundation data were developed in partnership with the Biota of North America Program, Fish & Wildlife Service, NRCS Wetland Science Institute, Army Corps of Engineers, Environmental Protection Agency, Geological Survey Biological Resources Division, Northeast Louisiana University, and others.
- **Flora of the United States:** Long-term project.

Plant Guides & Fact Sheets

The NPDC, in cooperation with the NRCS Plant Materials discipline and other partners, continues to expand the number of these documents available on PLANTS.